

## Docker Container Compatibility as a Host Infrastructure for Software Application Deployments: A Review

W.M.C.J.T. Kithulwatta<sup>1,2\*</sup>, K.P.N. Jayasena<sup>3</sup>, B.T.G.S. Kumara<sup>3</sup> and R.M.K.T. Rathnayaka<sup>4</sup>

<sup>1</sup>Faculty of Graduate Studies, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka

<sup>2</sup>Faculty of Technological Studies, Uva Wellassa University of Sri Lanka

<sup>3</sup>Department of Computing & Information Systems, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka

<sup>4</sup>Department of Physical Sciences & Technology, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka

\*chiranthajtk@gmail.com

Containerization is a novel computer technology that introduces an alternative computer infrastructure for traditional virtualization. Containers are executing on the container engine which was launched on the host computer infrastructure. Containers are dedicated to providing a very lightweight and isolated computer environment for software applications. Containers are a specific computerized package that includes all primary and fundamental software libraries, dependencies, and binaries to run software applications and services. Currently, computer practitioners are shifting to use containers to test, experiment and deploy software applications in the containerized environment. Among most container management technologies, Docker is a very famous and trending technology. This study was aimed to identify the Docker container compatibility for software application deployments. The objectives of the research study are to identify the Docker container trends, features, limitations, and direct integration with third-party technologies. For the study, thirty-five scholarly research articles, official Docker documentation and five online forum articles were used. By applying a thorough review process, the selected works of literature were summarized. Observations and investigations of the study bring the architectural view of Docker, Docker advantages, Docker limitations, Docker compatibility with third-party integrations and Docker features over other corresponding computer infrastructure technologies. As mentioned in the existing literature, Docker containerization is introducing a fabulous and marvellous market within the information technology domain especially of the cloud-based host infrastructures.

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